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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,499	09/28/2006	Kazuo Kuroda	8048-1196	3723
466	7590	04/29/2009	EXAMINER	
YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314				SHEN, KEZHEN
ART UNIT		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/594,499	KURODA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kezhen Shen	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 9/28/2009.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-13 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1.) Certified copies of the priority documents have been received.  
 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A computer program is merely a set of instructions capable of being implemented by a computer. However, by itself without being encoded onto a computer-readable medium is not realizable. Hence, claim 13 contains merely nonstatutory functional descriptive material. See MPEP 2106: IV(B)(1)(a), last paragraph.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 7,502,285 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because they all incorporate the invention of an information recording medium, apparatus or method of where a first and second recording layer comprises two or more buffer areas to prevent deviation when pickup is tracking the optical disc. Although claim 1 of 7,502,285 B2. is describing an information recording apparatus for recording information onto an information recording medium, however one of ordinary skill in the art would have realized the product (information recording medium) would require an apparatus (information recording apparatus) to form. Further, a "buffer area" in claim 1 of the current application is not described in claim 1 of 7,502,285 B2., however in claim 4 of 7,502,285 B2. a buffer area is described with similar limitations as

claim 1 of the current application. Therefore, the current application is rejected on the grounds of double patenting over 7,502,285 B2.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Junsaku et al. JP 2002-216361.

Regarding claim 1, Junsaku et al. teach an information recording medium comprising: a first recording layer in which a first recoding track path for recording record information, is formed (3 of Drawing 1, [0034] – [0037], front recording layer); a second recording layer which is disposed on said first recording layer and in which a second recoding track path for recording the record information, is formed in an opposite direction to the first recording track path (2 of Drawing 1, [0034] – [0037], back recording layer); and further, a first buffer area (8b1-8b4 of Drawing 3, [0046], non-record section) for preventing a recording or reproduction position from deviating from said first recording layer or said second recording layer ([0046] – [0055]), and for layer jump, on an outer circumferential edge portions of said first recording layer and said second recording layer ([0046] – [0055]), at least one portion of said first buffer area being formed in advance as a pre-recording area, of embossed pits or pits obtained by irradiation of recording laser ([0047], [0056] prepit), and said information recording

medium further comprising a management area to record therein identification information indicating whether or not at least one portion of said first buffer area is formed in advance as the pre-recording area ([0046] – [0055], [0066] – [0076]) address information).

Regarding claim 2, Junsaku et al. teach the information recording medium according to claim 1, wherein said management area is a recording management area for managing the recording of the record information (Drawing 3, [0046] – [0055], [0066] – [0076]).

Regarding claim 3, Junsaku et al. teach the information recording medium according to claim 1, wherein pre-format address information is recorded in said first recording layer and said second recording layer ([0046] – [0055] non-record section), and identification information indicating that said first buffer area is formed in advance (Abstract, [0047] prepit, prewrite and preemboss), is added to the pre-format address information ([0046] – [0055]).

Regarding claim 4, Junsaku et al. teach the information recording medium according to claim 1, wherein the identification information is start/end address information indicating a start or end position of at least one portion of said first buffer area formed in advance ([0059]).

Regarding claim 5, Junsaku et al. teach the information recording medium according to claim 4, wherein the start/end address information indicates that said first buffer area is not formed in advance, when having a predetermined value ([0046]).

Regarding claim 6, Junsaku et al. teach the information recording medium according to claim 1, wherein (i) at least one portion of said first buffer area is formed in advance of embossed pits ([0046] – [0055]), and a recording film capable of performing additional recording is laminated thereon ([0065]).

Regarding claim 7, Junsaku et al. teach an information recording apparatus for recording a first portion of the record information along the first recording track-path (3 of Drawing 3, [0036]), and for recording a second portion of the record information, with a recording direction turned around, along the second recording track path (2 of Drawing 3, [0036]), with respect to an information recording medium constructed such that a first recording layer has a first recording capacity and a second recording layer has a second recording capacity ([0034] – [0035] the two recording layers has two different recording area), said information recording medium comprising: a first recording layer in which a first recording track path for recording record information, is formed (3 of Drawing 1, [0034] – [0037], front recording layer); a second recording layer which is disposed on said first recording layer and in which a second recording track path for recording the record information, is formed in an opposite direction to the first recording track path (2 of Drawing 1, [0034] – [0037], back recording layer); and further, a first buffer area (8b1-8b4 of Drawing 3, [0046], non-record section) for preventing a recording or reproduction position from deviating from said first recording layer or said second recording layer ([0046] – [0055]), and for layer jump, on an outer circumferential edge portions of said first recording layer and said second recording layer ([0046] – [0055]), at least one portion of said first buffer area being formed in advance as a pre-

Art Unit: 2627

recording area, of embossed pits or pits obtained by irradiation of recording laser ([0047], [0056] prepit), and said information recording medium further comprising a management area to record therein identification information indicating whether or not at least one portion of said first buffer area is formed in advance as the pre-recording area ([0046] – [0055], [0066] – [0076]) address information) said information recording apparatus comprising: a writing device capable of respectively writing the first portion and the second portion into said first recording layer and said second recording layer ([0028] – [0029]), a calculating device for calculating a turn-around address on the first recording track path, in turning around from the first recording track path to the second recording track path ([0028], [0047] – [0055]), in a case where the first portion with an information amount which does not satisfy the first recording capacity, out of the record information, is written along the first recording track path ([0047] – [0055]), and where the second portion with an information amount which does not satisfy the second recording capacity is written along the second recording track path ([0047] – [0055]), on the basis of a total information amount of the record information ([0048] – [0049] from start address to target address), the start/end address information ([0045]), the first recording capacity ([0045] address of beginning and ending record feasible region of the front recording layer), and the second recording capacity ([0045] address of beginning and ending record feasible region of the back recording layer), and a controlling device for controlling said writing device ([0048]), to write the first portion along the first recording track path up to the calculated turn-around address ([0047] – [0055]), to add buffer data so as to form another portion of said first buffer area in said first recording

layer and said second recording layer ([0046] the non-record section can be recorded), and to write the second portion along the second recording track path from a correspondence address in said second recording layer corresponding to the calculated turn-around address in said first recording layer ([0047] – [0055]).

Regarding claim 8, Junsaku et al. teach the information recording apparatus according to claim 7, wherein said controlling device controls said writing device to write the buffer data ([0046] recording non-record section), in order to form a second buffer area for preventing a recording or reproduction position from deviating from an inner circumferential edge portion of said second recording layer (8a-8d of Drawing 3), in response to a finalize instruction for maintaining compatibility with a read-only or reproduce-only information recording medium ([0078] – [0083]).

Regarding claim 9, Junsaku et al. teach the information recording apparatus according to claim 7, wherein said controlling device controls said writing device to write the buffer data ([0046] recording non-record section), in order to form a third buffer area located on an inner circumferential side of said first buffer area (8a-8d of Drawing 3), on the basis of a total information amount of the record information ([0048] – [0049] from start address to target address), the start/end address information ([0045]), the first recording capacity ([0045] address of beginning and ending record feasible region of the front recording layer), and the second recording capacity ([0045] address of beginning and ending record feasible region of the back recording layer).

Regarding claim 10, Junsaku et al. teach the information recording apparatus according to claim 7, wherein said controlling device controls said writing device to write

the buffer data ([0046] recording non-record section), in order to form a fourth buffer area linked to said first buffer area (8a-8d of Drawing 3), on the basis of a total information amount of the record information ([0048] – [0049] from start address to target address), the start/end address information ([0045]), the first recording capacity ([0045] address of beginning and ending record feasible region of the front recording layer), and the second recording capacity ([0045] address of beginning and ending record feasible region of the back recording layer).

Regarding claim 11, Junsaku et al. teach the information recording apparatus according to claim 7, wherein said controlling device controls said writing device to write the buffer data ([0046] recording non-record section), in order to form a plurality of buffer areas located on an inner circumferential side of said first buffer area (8a-8d of Drawing 3), on the basis of a total information amount of the record information ([0048] – [0049] from start address to target address), the start/end address information ([0045]), the first recording capacity ([0045] address of beginning and ending record feasible region of the front recording layer), and the second recording capacity ([0045] address of beginning and ending record feasible region of the back recording layer).

Regarding claim 12, the limitations have been analyzed and rejected with respect to the reasons given above in claim 7. Further, one of ordinary skill in the art would have recognized the need for a method to operate the apparatus as claimed in claim 7.

Regarding claim 13, the limitations have been analyzed and rejected with respect to the reasons given above in claims 7 and 12.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kezhen Shen whose telephone number is (571) 270-1815. The examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kezhen Shen/  
Examiner, Art Unit 2627

/Joseph H. Feild/  
Supervisory Patent Examiner, Art  
Unit 2627